

Application No.: 10/758,716
Docket No.: AD6950 USNA

FEB 25 2008

Page 2

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A compression molding process for forming an isotropic thermotropic liquid crystalline part, comprising the steps:

(a) forming a molding composition of a powdered thermotropic liquid crystalline polymer having a particle size of 1000 mm or less, and optionally

(i) one or more other powdered resins; or

(ii) one or more fillers; or

(iii) one or more other powdered resins and one or more fillers;

(b) placing said molding composition into a mold or molding device;

(c) applying a pressure of about 700 kPa to about 3.5 MPa, and sufficient heat to melt while heating said mold or molding device to a temperature of at least 20°C above the melting point of said thermotropic liquid crystalline polymer; and

(d) increasing the applied pressure by at least a factor of 10 upon reaching said temperature of at least 20°C above the melting point of said thermotropic liquid crystalline polymer;

(e) maintaining said pressure and temperature for a time sufficient to melt the thermotropic liquid crystalline polymer throughout the composition being molded and to allow densification to take place; and

(f) cooling said mold or molding device to solidify said thermotropic liquid crystalline polymer to form a solid isotropic thermotropic liquid crystalline part with an apparent density as measured by the procedure of ASTM D792 of at least about 75% of the calculated density.

2. (Withdrawn) An apparatus, comprising, an isotropic part which comprises a thermotropic liquid crystalline polymer on which is mounted one or more electric or electronic components.

3. (Withdrawn) An improved process for reducing wear between a first part having a first surface comprising a thermoplastic, and a second part having a second surface, said first and second surfaces being in contact with one another and moving with respect to

Application No.: 10/758,716
Docket No.: AD6950 USNA

Page 3

one another, wherein the improvement comprises, said first part being isotropic and comprising a thermotropic liquid crystalline polymer.

4. (Withdrawn) An article according to Claim 1 or 3 which are labyrinth seals, bearings, vacuum pump vanes, hot runner inserts, rolls, LCD sputtering holders, valves, thrust washers, computer chip contactors and nests or CMP retaining rings or components in semiconductor manufacturing, oil production, or clean room operation.

5. (Withdrawn) An isotropic thermotropic liquid crystalline part made by the process of claim 1.

6. (Withdrawn) The isotropic thermotropic liquid crystalline part of claim 5 with an apparent density as measured by the procedure of ASTM D792 of at least about 75% of the calculated density.

7. (Withdrawn) The isotropic thermotropic liquid crystalline part of claim 5 with an apparent density as measured by the procedure of ASTM D792 of at least about 90% of the calculated density.

8. (Withdrawn) The isotropic thermotropic liquid crystalline part of claim 5 with an apparent density as measured by the procedure of ASTM D792 of at least about 98% of the calculated density.

9. (New) The compression molding process of claim 1, wherein said isotropic thermotropic liquid crystalline part has an apparent density as measured by the procedure of ASTM D792 of at least about 90% of the calculated density.

10. (New) The compression molding process of claim 9, wherein said isotropic thermotropic liquid crystalline part has an apparent density as measured by the procedure of ASTM D792 of at least about 98% of the calculated density.